STIC Search Report
EIC 2100

STIC Database Tracking Number: 141899

TO:	From:
Linh M Black **Location: RND 3C03** **Art Unit : 2167** **Thursday, January 06, 2005** **Case Serial Number: 09/978182**	**David Holloway** **Location: EIC 2100** **RND 4B19** **Phone: 2-3528** **david.holloway@uspto.gov**

Search Notes

Dear Examiner Black,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David

STIC EIC 2100 Search Request Form

14/899

Today's Date: 1/6/05

What date would you like to use to limit the search?
Priority Date: 10/19/00 Other:

Name Linh Black
AU 2167 Examiner # 77864
Room # 3C3 Phone *571-272-4106
Serial # 09/978,182

Format for Search Results (Circle One):
(PAPER) DISK EMAIL
Where have you searched so far?
USP DWPI EPO JPO ACM IBM TDB
IEEE INSPEC SPI Other

Is this a "Fast & Focused" Search Request? (Circle One) (YES) NO
A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at http://ptoweb/patents/stic/stic-tc2100.htm.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

A method of classifying an object stored on computer-readable media by undertaking the following types of data analysis:

Computing the following individual data type coefficients
(i) the text coefficient
(ii) the image coefficient
(iii) the audio coefficient
(iv) the video coefficient
(v) descriptor coefficient
(vi) name coefficient
(vii) a plug-in coefficient
(viii) a relational coefficient

STIC Searcher David Hollowell Phone 2-3528
Date picked up 1-6-05 Date Completed 1-6-05

sira Search and Information Resources Administration

DH 1/6/05
WWW

```
Set     Items   Description
S1          9   ADULT()CONTENT (10N) (WEIGH? OR SCORE? OR COEFFICIENT? OR -
             VECTOR? OR FACTOR?)
S2          7   RD (unique items)
S3          5   S2 NOT PY>2000
File 636:Gale Group Newsletter DB(TM) 1987-2005/Jan 06
         (c) 2005 The Gale Group
File  16:Gale Group PROMT(R) 1990-2005/Jan 06
         (c) 2005 The Gale Group
File 484:Periodical Abs Plustext 1986-2005/Jan W1
         (c) 2005 ProQuest
File 674:Computer News Fulltext 1989-2004/Dec W2
         (c) 2004 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2005/Jan 04
         (c) 2005 The Gale Group
File  15:ABI/Inform(R) 1971-2005/Jan 06
         (c) 2005 ProQuest Info&Learning
File 148:Gale Group Trade & Industry DB 1976-2005/Jan 06
         (c)2005 The Gale Group
```

```
Set     Items   Description
S1    2941372   OBJECT? OR PAGE? OR WEBSITE? OR WEBPAGE? OR FILE? OR DATAF-
            ILE? OR COMPUTER()READABLE()MEDIA OR INTERNET()CONTENT? OR WE-
            B()(SITE? OR PAGE?)
S2    2615802   IDENTIFY OR CLASSIFY OR INDEX? OR FILTER? OR CATALOG?
S3    3472220   TEXT? OR WORDS OR WORDS OR TERM OR TERMS
S4    2863913   IMAGE? OR PIXEL? OR GRAPHIC? OR JPG OR JPEG? OR JPG? OR GIF
             OR GIFS OR TIFF OR BMP OR BITMAP? ? OR BINARY
S5     686090   AUDIO? OR SOUND OR SOUNDS OR MUSIC? OR SOUNDTRACK?
S6     591985   VIDEO OR (MOVING OR MOTION)()PICTURE? OR VIDEOS OR MULTIME-
            DIA OR MULTI()MEDIA?
S7      81898   DESCRIPTOR? OR KEYWORD? OR (KEY OR INDEX)()(WORD? OR TERM -
            OR TERMS)
S8     321438   NAME OR FILENAME? OR NAMES OR LABEL OR LABELS
S9      19198   PLUGIN OR PLUG()IN OR APPLET? OR ACTIVEX OR ACTIVE()X
S10   4454460   RELATIONAL? OR ASSOCIAT? OR LINK?
S11   5714040   SCORE? OR RANK? OR FACTOR? OR COEFFICIENT?
S12      4475   S2(3N)(ADULT? OR SEXUAL OR MATURE? OR INAPPROPRIATE? OR PR-
            IVATE?)
S13     66824   S1 AND S2 AND S11
S14     30987   S13 AND (S4:S10)
S15    206695   (MULTIPL? OR PLURAL? OR SEVERAL OR DIFFERENT?)(2N)(CRITERIA
             OR CRITERION OR FEATURE? OR FACTOR?)
S16       943   S14 AND S15
S17      4475   S12(3N)S2
S18         6   S16 AND S17
S19     45296   S2(3N)(CONTENT? OR CONTEXT? OR SUBJECT?)
S20        15   S16 AND S19
S21        21   S18 OR S20
S22        18   RD (unique items)
S23         9   S22 NOT PY>2000
S24        24   S2(3N)S4(3N)S15(3N)S11
S25       414   S2(3N)(S5 OR S4)(3N)(ADULT? OR SEX? OR MATURE OR NUDIT? OR
            INAPPROPRIAT? OR APPROPRIAT?)
S26         0   S16 AND S25
S27        10   S15 AND S25
S28        43   S27 OR S24 OR S23
S29        31   RD (unique items)
S30        23   S29 NOT PY>2000
File   8:Ei Compendex(R) 1970-2005/Dec W4
         (c) 2005 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Dec
         (c) 2004 ProQuest Info&Learning
File  65:Inside Conferences 1993-2005/Jan W1
         (c) 2005 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/Dec W2
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Nov W4
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2005/Jan 04
         (c) 2005 The Gale Group
File   6:NTIS 1964-2004/Dec W4
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/Dec W1
         (c) 2004 INIST/CNRS
File  34:SciSearch(R) Cited Ref Sci 1990-2005/Jan W1
         (c) 2005 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Nov
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Jun W1
         (c) 2004 FIZ TECHNIK
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30/5/3 (Item 3 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

04788675 E.I. No: EIP97083788198

Title: Constraints on using AVHRR composite index imagery to study patterns of vegetation cover in boreal forests

Author: Kasischke, E.S.; French, N.H.F.
Corporate Source: Environmental Research Inst of Michigan, Ann Arbor, MI, USA

Source: International Journal of Remote Sensing v 18 n 11 Jul 20 1997. p 2403-2426
Publication Year: 1997
CODEN: IJSEDK ISSN: 0143-1161
Language: English
Document Type: JA; (Journal Article) Treatment: G; (General Review)
Journal Announcement: 9710W2

Abstract: A wide range of techniques are being developed to map vegetation cover types using multi-date imagery from the Advanced Very High Resolution Radiometer. To date, these techniques do not account for severe constraints which exist for the world's boreal forest. Using composite AVHRR **imagery** collected over Alaska, we demonstrate how **several factors** influence the time-series normalized vegetation difference **index** (NDVI) signatures developed for the boreal forests in this region, including the effects of: (1) clouds and atmospheric haze; (2) climate variations on plant phenology; (3) fire on forest succession; and (4) forest stand patch size with respect to system resolution. Based on the analysis of AVHRR composite data from Alaska, the results of this study show: (1) clouds and haze have distinct effects on the intra-seasonal NDVI signature; (2) there are significant interseasonal variations in NDVI signatures caused by variations in the length of the growing season as well as variations in precipitation and moisture during the growing season; (3) disturbances affect large areas in interior Alaska and forest succession after fire results in significant variations in the inter-seasonal NDVI signatures; and (4) much of the landscape in interior Alaska consists of heterogeneous patches of forest which are much smaller than the resolution cell size of the AVHRR sensor, resulting in significant sub-pixel mixing. Based on these findings, the overall conclusion of this study is scientists using AVHRR to map land cover types in boreal regions must develop approaches which account for these sources of variation. (Author abstract) 42 Refs.

Descriptors: *Remote sensing; Radiometers; Forestry; Time series analysis; Precipitation (meteorology); Moisture; Pattern recognition; Imaging techniques
Identifiers: Boreal forests; Advanced very high resolution radiometer (AVHRR)
Classification Codes:
731.1 (Control Systems); 944.7 (Radiation Measuring Instruments); 922.2 (Mathematical Statistics); 443.3 (Precipitation); 443.1 (Atmospheric Properties)
731 (Automatic Control Principles); 944 (Moisture, Pressure & Temperature, & Radiation Measuring Instruments); 821 (Agricultural Equipment & Methods); 922 (Statistical Methods); 443 (Meteorology)
73 (CONTROL ENGINEERING); 94 (INSTRUMENTS & MEASUREMENT); 82 (AGRICULTURE & FOOD TECHNOLOGY); 92 (ENGINEERING MATHEMATICS); 44 (WATER & WATERWORKS ENGINEERING)

01403592 ORDER NO: AADAA-I9509165

IMAGE SAMPLING RATE AND IMAGE PATTERN RECOGNITION

Author: SRIKANTAN, GEETHA
Degree: PH.D.
Year: 1994
Corporate Source/Institution: STATE UNIVERSITY OF NEW YORK AT BUFFALO (0656)
Adviser: S. N. SRIHARI
Source: VOLUME 55/11-B OF DISSERTATION ABSTRACTS INTERNATIONAL. PAGE 4951. 127 PAGES
Descriptors: COMPUTER SCIENCE; ENGINEERING, ELECTRONICS AND ELECTRICAL; STATISTICS
Descriptor Codes: 0984; 0544; 0463

The effect of dimensionality of data representation on the performance of a pattern classification system has been studied by several researchers. Theoretical results relate performance and measurement dimensionality for finite and infinite training set sizes. Previous work has focussed on general measurement representations. This dissertation examines the relation between the data representation determined by the sampling rate and the recognition accuracy in pattern classification systems.

Increasing the sampling rate of digitization of data is modeled here as a refinement of the representation, without requiring reconstructibility of data digitized at a lower sampling rate. Previous results bounding the probability of error of a pattern classification system are examined under the refinement constraint. As the sampling rate is increased, performance improvements are expected; this is reflected in the improved bounds on the probability of error under the refinement constraint.

While theoretical bounds on error probability are of great interest, the assumptions of data set size under which they hold are difficult to satisfy in practice. In practical problems such as optical character recognition (or OCR), this problem takes on a particular significance. The OCR system performance time can be improved considerably by operating on coarse data representations (i.e. low sampling rate of digitization); also for certain problems, high resolution data may not be available. An estimate of the error probability under these conditions is needed.

A computational model is proposed to examine the effect of sampling rate on optical character recognition. A novel application of multirate **filter** theory for resampling **images** by fractional **factors** is presented. **Several feature** extraction and classification methods have been used in the experiments. English and Japanese handwritten and machine-printed characters of varying quality have been utilized in the experiments.

The empirical results show that increasing the sampling rate indeed, improves recognition accuracy across all data sets. Conversely, the results also provide an estimate of the intrinsic error in recognition for coarse data representation.

```
Set     Items   Description
S1     884662   OBJECT? OR PAGE? OR WEBSITE? OR WEBPAGE? OR FILE? OR DATAF-
             ILE? OR COMPUTER()READABLE()MEDIA
S2    1019218   IDENTIFY OR CLASSIFY OR INDEX? OR FILTER? OR CATALOG?
S3     907160   TEXT? OR WORDS OR WORDS OR TERM OR TERMS
S4    1373042   IMAGE? OR PIXEL? OR GRAPHIC? OR JPG OR JPEG? OR JPG? OR GIF
            OR GIFS OR TIFF OR BMP OR BITMAP? ? OR BINARY
S5     373559   AUDIO? OR SOUND OR SOUNDS OR MUSIC? OR SOUNDTRACK?
S6     479833   VIDEO OR (MOVING OR MOTION)()PICTURE? OR VIDEOS OR MULTIME-
             DIA OR MULTI()MEDIA?
S7      13820   DESCRIPTOR? OR KEYWORD? OR (KEY OR INDEX)()(WORD? OR TERM -
             OR TERMS)
S8     136850   NAME OR FILENAME? OR NAMES OR LABEL OR LABELS
S9      18144   PLUGIN OR PLUG()IN OR APPLET? OR ACTIVEX OR ACTIVE()X
S10    861686   RELATIONAL? OR ASSOCIAT? OR LINK?
S11    444883   SCORE? OR RANK? OR FACTOR? OR COEFFICIENT?
S12       180   S2(3N)(ADULT? OR SEXUAL OR MATURE? OR INAPPROPRIATE? OR PR-
             IVATE?)
S13      3123   S1 AND S2 AND S11
S14      1449   S13 AND (S4:S10)
S15     13034   (MULTIPL? OR PLURAL? OR SEVERAL OR DIFFERENT?)(2N)(CRITERIA
            OR CRITERION OR FEATURE? OR FACTOR?)
S16        43   S14 AND S15
S17         6   S16 AND IC=(G06F? OR H04L?)
S18        34   S16 NOT AD=20001019:20031019
S19        36   S17 OR S18
S20        36   IDPAT (sorted in duplicate/non-duplicate order)
S21        36   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200501
         (c) 2005  Thomson Derwent
```

21/5/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013778019
WPI Acc No: 2001-262230/200127
XRPX Acc No: N01-187584
Keyword **selection procedure during their screening for suitability, involves grading them quantitatively before choosing** keyword **groups based on their computed compound weights**
Patent Assignee: SHIKANO Y (SHIK-I); URYU H (URYU-I)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2001052030	A	20010223	JP 99260861	A	19990812	200127	B

Priority Applications (No Type Date): JP 99260861 A 19990812
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001052030	A		3	G06F-017/30	

Abstract (Basic): JP 2001052030 A
NOVELTY - A gradation procedure that **ranks** individual **keywords** through quantitative weightage assignment is established, from a larger set of initially identified **keywords** . Then, a context specific scrutiny of any such **keyword** combinations computes their net compounded weightages as applicable before implementing the selection of such **keyword** groups.
USE - Specific use areas for the above **keyword** group selection procedure include **index** preparations, contents analysis, information retrieval, etc.
ADVANTAGE - Formulates an **objective** , quantifiable basis from amongst **several** individualized **criteria** and helps to eliminate excess subjectivity in any selection of **keyword** groups.
pp; 3 DwgNo 0/0
Title Terms: **KEYWORD** ; SELECT; PROCEDURE; SCREEN; SUIT; GRADE; QUANTITATIVE; CHOICE; **KEYWORD** ; GROUP; BASED; COMPUTATION; COMPOUND; WEIGHT
Derwent Class: T01
International Patent Class (Main): **G06F-017/30**
File Segment: EPI

21/5/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX

013326172 **Image available**
WPI Acc No: 2000-498111/200044
XRPX Acc No: N00-369143
Feature vector indexing **method for** image **search engine, involves applying generated constraints to** index **values to select subset of feature vectors**
Patent Assignee: VIRAGE INC (VIRA-N)
Inventor: BACH J R; HOROWITZ B
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6084595	A	20000704	US 9736011	A	19970224	200044 B
			US 9828279	A	19980224	

Priority Applications (No Type Date): US 9736011 P 19970224; US 9828279 A 19980224
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6084595	A		13	G06T-017/00	Provisional application US 9736011

Abstract (Basic): US 6084595 A
NOVELTY - **Index** valves (222) indicating features of feature vector which indicates one of several **objects** is selected using a distance metric. Target **feature** vector and **several** user weights are provided to generate a constraint which is then applied to **index** values to select a subset of feature vectors.
DETAILED DESCRIPTION - Each feature vector indicates one of several **objects** such as **image** or visual information. Each feature vector consists of a primitive which is either a color or texture or shape. Each primitive **associated** with a pair of the **object** , identifies **several features** which include hue, saturation, mean intensity, edge intensity, randomness, periodicity and orientation. Each feature has an **associated** feature **coefficients** .
USE - For accelerating content-based retrieval of visual **objects** by use of **indexing** techniques for **image** search engine.
ADVANTAGE - Since two constraint functions are provided for each primitive, efficient processing by **relational** database systems is allowed. Enables providing very efficient content-based retrieval of visual **objects** by using commercial database systems such as oracle.
DESCRIPTION OF DRAWING(S) - The figure shows the diagram of process performed by **indexed** visual **object** retrieval system.
Index values (222)
pp; 13 DwgNo 3/5
Title Terms: FEATURE; VECTOR; **INDEX** ; METHOD; **IMAGE** ; SEARCH; ENGINE; APPLY; GENERATE; CONSTRAIN; **INDEX** ; VALUE; SELECT; SUBSET; FEATURE; VECTOR
Derwent Class: T01
International Patent Class (Main): G06T-017/00
File Segment: EPI

21/5/14 (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX

012042290 **Image available**
WPI Acc No: 1998-459200/199840
XRPX Acc No: N98-358617

Object -oriented adaptive prefiltering apparatus for low bit-rate video **system such as** video **teleconferencing system - includes** filter **selector that** ranks **identified** image **parameters based on overall importance to** video **sequence, and selects** filtering factor **for adjusting strength of** filter **used to** filter pixels associated **with identified** image **parameters**

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE); SHARP KK (SHAF)
Inventor: OKADA H
Number of Countries: 026 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 863671	A1	19980909	EP 97309715	A	19971202	199840	B
JP 10229505	A	19980825	JP 97348873	A	19971218	199844	
US 6456328	B1	20020924	US 96827911	A	19961218	200266	

Priority Applications (No Type Date): US 96827911 A 19961218
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 863671	A1	E	21	H04N-007/26	
	Designated States (Regional): AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI				
JP 10229505	A		18	H04N-005/14	
US 6456328	B1			H04N-007/26	

Abstract (Basic): EP 863671 A

The apparatus includes a first connector adapted to receive a **video** signal. An extractor analyzes the **video** signal and identifies **pixels** in the **video** signal that are **associated** with at least two predetermined **image** parameters, such that the number of **pixels associated** with one of the **image** parameters is less than the total number of **pixels** in the **video** signal. A selector assigns a first predetermined **factor** to the **pixels associated** with at least one of the predetermined **image** parameters.

A **filter** is provided to **filter** the **video** signal such that the **filter** strength applied to the **pixels** that are assigned the first predetermined **factor** is **different** from the **filter** strength applied to at least one other **pixel** in the **video** signal. A second connector is adapted to transmit the **filtered video** signal. The selector **ranks** the predetermined **image** parameters based on their overall importance to the **video** sequence.

ADVANTAGE - Reduces number of bits to be coded.

Dwg.13/13

Title Terms: **OBJECT** ; ORIENT; ADAPT; PREFILTER; APPARATUS; LOW; BIT; RATE; **VIDEO** ; SYSTEM; **VIDEO** ; TELECONFERENCE; SYSTEM; **FILTER** ; SELECT; **RANK** ; **IDENTIFY** ; **IMAGE** ; PARAMETER; BASED; OVERALL; IMPORTANT; **VIDEO** ; SEQUENCE; SELECT; **FILTER** ; **FACTOR** ; ADJUST; STRENGTH; **FILTER** ; **FILTER** ; **PIXEL** ; **ASSOCIATE** ; **IDENTIFY** ; **IMAGE** ; PARAMETER
Derwent Class: W02; W04
International Patent Class (Main): H04N-005/14; H04N-007/26
International Patent Class (Additional): G06T-005/20; H04N-007/24
File Segment: EPI

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Set      Items   Description
S1      884662   OBJECT? OR PAGE? OR WEBSITE? OR WEBPAGE? OR FILE? OR DATAF-
             ILE? OR COMPUTER()READABLE()MEDIA
S2     1019218   IDENTIFY OR CLASSIFY OR INDEX? OR FILTER? OR CATALOG?
S3      907160   TEXT? OR WORDS OR WORDS OR TERM OR TERMS
S4     1373042   IMAGE? OR PIXEL? OR GRAPHIC? OR JPG OR JPEG? OR JPG? OR GIF
              OR GIFS OR TIFF OR BMP OR BITMAP? ? OR BINARY
S5      373559   AUDIO? OR SOUND OR SOUNDS OR MUSIC? OR SOUNDTRACK?
S6      479833   VIDEO OR (MOVING OR MOTION)()PICTURE? OR VIDEOS OR MULTIME-
             DIA OR MULTI()MEDIA?
S7       13820   DESCRIPTOR? OR KEYWORD? OR (KEY OR INDEX)()(WORD? OR TERM -
             OR TERMS)
S8      136850   NAME OR FILENAME? OR NAMES OR LABEL OR LABELS
S9       18144   PLUGIN OR PLUG()IN OR APPLET? OR ACTIVEX OR ACTIVE()X
S10     861686   RELATIONAL? OR ASSOCIAT? OR LINK?
S11     444883   SCORE? OR RANK? OR FACTOR? OR COEFFICIENT?
S12        180   S2(3N)(ADULT? OR SEXUAL OR MATURE? OR INAPPROPRIATE? OR PR-
             IVATE?)
S13       3123   S1 AND S2 AND S11
S14       1449   S13 AND (S4:S10)
S15      13034   (MULTIPL? OR PLURAL? OR SEVERAL OR DIFFERENT?)(2N)(CRITERIA
              OR CRITERION OR FEATURE? OR FACTOR?)
S16         43   S14 AND S15
S17          6   S16 AND IC=(G06F? OR H04L?)
S18         34   S16 NOT AD=20001019:20031019
S19         36   S17 OR S18
S20         36   IDPAT (sorted in duplicate/non-duplicate order)
S21         36   IDPAT (primary/non-duplicate records only)
S22        180   S12(3N)S2
S23          0   S22 AND S15
S24        105   S22 AND (CRITERIA? OR CRITERON OR FEATURE? OR FACTOR? OR M-
             ETHOD? OR SYSTEM?)
S25         30   S24 AND S4:S10
S26         30   S25 NOT S19
S27          8   S26 AND IC=G06F?
S28         18   S26 NOT AD=20000119:20020119
S29          7   S27 NOT AD=20020119:20050110
S30          8   S29 OR S27
S31          8   IDPAT (sorted in duplicate/non-duplicate order)
S32          8   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200501
         (c) 2005  Thomson Derwent
```

32/5/3 **(Item 3 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014633555 **Image available**
WPI Acc No: 2002-454259/200248
XRPX Acc No: N02-358333
Internet object classifying method **involves computing** descriptor , name , **text**, image , audio , video , plug in **and** relational **coefficients**
Patent Assignee: MORIN P R (MORI-I); WHITEHEAD A D (WHIT-I)
Inventor: MORIN P R; WHITEHEAD A D
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020059221	A1	20020516	US 2001978182	A	20011017	200248	B
CA 2323883	A1	20020419	CA 2323883	A	20001019	200248	

Priority Applications (No Type Date): CA 2323883 A 20001019
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020059221	A1		26	G06F-007/00	
CA 2323883	A1	E		G06F-017/00	

Abstract (Basic): US 20020059221 A1
NOVELTY - The **descriptor** coefficient, the **name** coefficient, the text coefficient, the **image** coefficient, the **audio** coefficient, **video** coefficient, the **plug in** coefficient and the **relational** coefficient are computed and are weighted, excluding the **relational** coefficient, for generating weighted sum.
USE - For classifying Internet objects such as text, **images** , **audio** , **video** , web pages, documents, email, chat, group postings, etc., stored in computer-readable media such as floppy disk, hard disk, CD-ROM, etc.
ADVANTAGE - The **method** classifies the objects more accurately, so as to **filter** the **adult** contents and preventing minors from viewing the adult contents.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of computer **system** .
pp; 26 DwgNo 1/12
Title Terms: OBJECT; CLASSIFY; **METHOD** ; COMPUTATION; DESCRIBE; **NAME** ; TEXT; **IMAGE** ; **AUDIO** ; **VIDEO** ; PLUG; RELATED; COEFFICIENT
Derwent Class: T01
International Patent Class (Main): **G06F-007/00** ; **G06F-017/00**
International Patent Class (Additional): **G06F-017/20** ; G06T-007/40; H04L-012/22
File Segment: EPI

32/5/4 **(Item 4 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014081092 **Image available**
WPI Acc No: 2001-565306/200163
XRPX Acc No: N01-420875

Client side data processing apparatus, includes processor that processes the identified tag type commands according to a predefined set of rules

Patent Assignee: ADSCIENCE LTD (ADSC-N)
Inventor: BAYLEY B; GIBBS J
Number of Countries: 094 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200159612	A2	20010816	WO 2001GB603	A	20010214	200163	B
AU 200132105	A	20010820	AU 200132105	A	20010214	200175	
GB 2369210	A	20020522	GB 20013636	A	20010214	200241	

Priority Applications (No Type Date): GB 20003382 A 20000214
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200159612	A2	E	45	G06F-017/30	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200132105	A		G06F-017/30	Based on patent WO 200159612
GB 2369210	A		G06F-017/21	

Abstract (Basic): WO 200159612 A2

NOVELTY - The apparatus includes command identifiers for identifying several types of received tag type commands, and a processor to process the commands according to a predefined set of rules.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a **method** in controlling the functionality of the received tag type commands.

USE - For **filtering** advertising information and **adult** information e.g. pornography, bad language, violent subjects, drugs.

ADVANTAGE - Mitigates problems in using updated universal resource locator (URL) lists of banned web sites because the content of the page is being considered rather than a possibly out-of-date data **descriptor**. Ensures effective recognition of advertisements. Knowledge of all types of commands used for advertising provides a difficult to bypass screen which can be used to delete all such recognized advertisement data if required. Whole web sites can be filtered on the basis of their content regardless of what they are called, thus new sites which arise can be filtered even if their URLs have nit been previously known.

DESCRIPTION OF DRAWING(S) - The figure schematically illustrates the components of a computer.

pp; 45 DwgNo 4/11

Title Terms: CLIENT; SIDE; DATA; PROCESS; APPARATUS; PROCESSOR; PROCESS; IDENTIFY; TAG; TYPE; COMMAND; ACCORD; PREDEFINED; SET; RULE
Derwent Class: T01
International Patent Class (Main): **G06F-017/21**
International Patent Class (Additional): **G06F-017/30**
File Segment: EPI

```
Set      Items   Description
S1      884662   OBJECT? OR PAGE? OR WEBSITE? OR WEBPAGE? OR FILE? OR DATAF-
             ILE? OR COMPUTER()READABLE()MEDIA
S2     1019218   IDENTIFY OR CLASSIFY OR INDEX? OR FILTER? OR CATALOG?
S3      907160   TEXT? OR WORDS OR WORDS OR TERM OR TERMS
S4     1373042   IMAGE? OR PIXEL? OR GRAPHIC? OR JPG OR JPEG? OR JPG? OR GIF
              OR GIFS OR TIFF OR BMP OR BITMAP? ? OR BINARY
S5      373559   AUDIO? OR SOUND OR SOUNDS OR MUSIC? OR SOUNDTRACK?
S6      479833   VIDEO OR (MOVING OR MOTION)()PICTURE? OR VIDEOS OR MULTIME-
             DIA OR MULTI()MEDIA?
S7       13820   DESCRIPTOR? OR KEYWORD? OR (KEY OR INDEX)()(WORD? OR TERM -
             OR TERMS)
S8      136850   NAME OR FILENAME? OR NAMES OR LABEL OR LABELS
S9       18144   PLUGIN OR PLUG()IN OR APPLET? OR ACTIVEX OR ACTIVE()X
S10     861686   RELATIONAL? OR ASSOCIAT? OR LINK?
S11     444883   SCORE? OR RANK? OR FACTOR? OR COEFFICIENT?
S12        180   S2(3N)(ADULT? OR SEXUAL OR MATURE? OR INAPPROPRIATE? OR PR-
             IVATE?)
S13       3123   S1 AND S2 AND S11
S14       1449   S13 AND (S4:S10)
S15      13034   (MULTIPL? OR PLURAL? OR SEVERAL OR DIFFERENT?)(2N)(CRITERIA
              OR CRITERION OR FEATURE? OR FACTOR?)
S16         43   S14 AND S15
S17          6   S16 AND IC=(G06F? OR H04L?)
S18         34   S16 NOT AD=20001019:20031019
S19         36   S17 OR S18
S20         36   IDPAT (sorted in duplicate/non-duplicate order)
S21         36   IDPAT (primary/non-duplicate records only)
S22        180   S12(3N)S2
S23          0   S22 AND S15
S24        105   S22 AND (CRITERIA? OR CRITERON OR FEATURE? OR FACTOR? OR M-
             ETHOD? OR SYSTEM?)
S25         30   S24 AND S4:S10
S26         30   S25 NOT S19
S27          8   S26 AND IC=G06F?
S28         18   S26 NOT AD=20000119:20020119
S29          7   S27 NOT AD=20020119:20050110
S30          8   S29 OR S27
S31          8   IDPAT (sorted in duplicate/non-duplicate order)
S32          8   IDPAT (primary/non-duplicate records only)
S33       2464   MC=(T01-N03A1A OR T01-S01C?)
S34          3   S33 AND S14
S35          2   S34 NOT (S32 OR S18)
File 347:JAPIO Nov 1976-2004/Aug(Updated 041203)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200501
         (c) 2005  Thomson Derwent
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RESEARCH

The Institute's research programme currently covers a range of activities including software engineering and design projects, evaluating software and systems, and in-depth surveys of users of images. The programme aims to contribute to knowledge in a number of areas, including user needs for visual information, content-based image retrieval techniques, and mechanisms of human image retrieval. Beneficiaries of this research will include patent and trade mark registries world-wide, art galleries, museums, libraries in all sectors, and other organisations providing image-based information services on CD-ROM or over the Internet.

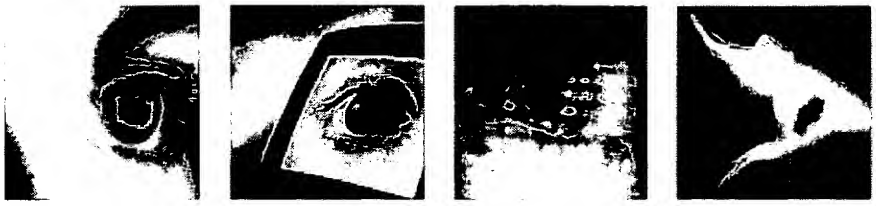
PROJECTS

- MERMAID: Multimedia Electronic Resources Management AID, A simple image database with text based searching and CBIR capability
- Image database visualisation, Mapping techniques used to visualise image collections
- MARIAN: Matching And Retrieval of Images At Northumbria, a general image retrieval system developed for colour images.
- SHREW: A SHape REtrieval system for Watermarks, a joint project with the Conservation Unit, School of Humanities, University of Northumbria
- ARTISAN 2: Automatic Retrieval of Trademark Images by Shape ANalysis, an improved retrieval system for abstract trademark images
- ARTISAN: Automatic Retrieval of Trademark Images by Shape ANalysis, a retrieval system for abstract trademark images
- SPIRIT: Shape Perception for Improved Retrieval of Images of Trademarks, an investigation into the effect of systematic application of research in the field of human visual cognition to the shape retrieval problem
- SAFARI, a shape retrieval system for engineering drawings

- VISOR: Visual Information Seeking Oriented Research - Information seeking behaviour in image retrieval
- VISOR II - A user-oriented evaluation framework for the development of electronic image retrieval systems
- Compare and Contrast: A Study of the Impact of Digital Image Technology on Art History
- A User-oriented Visual Query Interface

- Content-Based Image Retrieval. The Institute has a number of ongoing projects in this field.

- Description and indexing of images, report of a survey of ARLIS UK members, 1998/99



This site was last updated: 23 January 2004

INTERNET ARCHIVE
WayBackMachine

Enter Web Address: http:// All Take Me Back Adv. Search Compare Arc

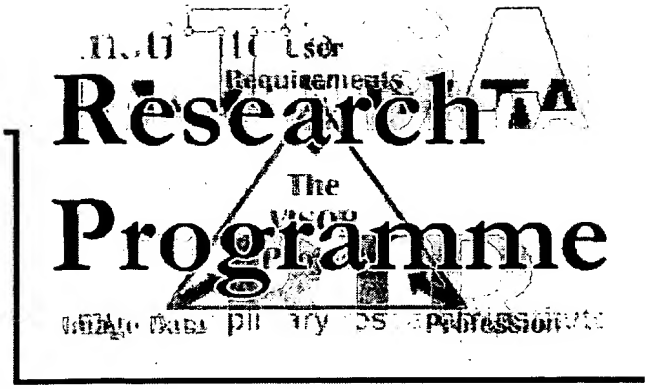
Searched for **http://www.unn.ac.uk/iidr/CBIR/cbir.html** **23** Results

* denotes when site was updated.

Search Results for Jan 01, 1996 - Jan 06, 2005

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0 pages	0 pages	0 pages	0 pages	5 pages	8 pages	4 pages	5 pages	1 pages	0 pages
				Mar 03, 2000 *	Apr 19, 2001	Feb 02, 2002	Feb 18, 2003	Feb 19, 2004 *	
				Jun 14, 2000 *	Jun 03, 2001	Apr 18, 2002 *	Apr 14, 2003		
				Aug 17, 2000 *	Aug 04, 2001	Jun 06, 2002	Aug 13, 2003		
				Sep 30, 2000	Nov 09, 2001	Oct 19, 2002 *	Dec 09, 2003		
				Dec 03, 2000	Nov 16, 2001		Dec 11, 2003		
					Nov 20, 2001				
					Nov 22, 2001				
					Nov 25, 2001				

Home | Help



CONTENT-BASED IMAGE RETRIEVAL

This joint project between the Institute and the Manchester Visualization Centre, University of Manchester, is funded by the JISC (Joint Information Systems Committee) Technology Applications Programme. Its principal aims are:

1. To report on the current state of the art in content-based image retrieval, with particular emphasis on the capabilities and limitations of current technology, and the extent to which it is likely to prove of practical use to users in higher education and elsewhere, and to identify areas in which further research is required.
2. To undertake an evaluation of available CBIR software systems.
3. To test the applicability of CBIR methods and software systems in a small range of practical application environments, involving representatives of user groups, and in so doing generate a body of relevant experience and knowledge.
4. To raise awareness of this technology in the user and developer communities through web-based demonstrator systems, widely disseminated reports and through hosting seminars and workshops.

1. REPORT ON CONTENT-BASED IMAGE RETRIEVAL

Interest in the potential of digital images has increased enormously over the last few years. Users are exploiting the opportunity to access remotely-stored images in all kinds of new and exciting ways. However, this has exacerbated the problem of locating a desired image in a large and varied collection. This has led to the rise of a new R & D field - content-based image retrieval (CBIR), the retrieval of images on the basis of features automatically extracted from the images themselves. CBIR is a highly active research field, and the technology is now beginning to move into the marketplace. However, the practical usefulness of CBIR techniques remains unproven, making it difficult to reach informed decisions on their adoption. To help inform the UK Higher Education community about developments in this field, JISC (the Joint Information Systems Committee of the Higher Education Funding Councils) is commissioning a number of CBIR- related studies. As part of this initiative, JISC invited the Institute for Image Data Research at the University of Northumbria to prepare a state-of-the-art report on CBIR techniques.

Our report reviews the current state of the art in research, development and implementation of CBIR techniques within the UK. The work involved a survey of the current research and professional literature (including material on the World-Wide Web), together with discussions with UK and overseas researchers, major users of image data and representatives of standards bodies. The report reviews what is known about the needs of users of image data, assesses the capabilities

and limitations of current approaches to image retrieval, outline current research trends in the area, discusses the implications of standards, and makes recommendations for further work.

As part of this project, we sounded out the views of both researchers and practitioners. We were interested in researchers' opinions on issues such as:

The most important research questions that we should be tackling
Technical and human barriers to progress in adoption of CBIR techniques

and practitioners' opinions on issues such as:

How well informed are they on the capabilities of current CBIR systems
How useful they consider such techniques are likely to be managing image data

The final report is available here (N.B. This report is a long document - approximately 60 pages printed on A4). Printed copies are available from JISC. If you wish to put forward a point of view, contact the authors by email at john.eakins@unn.ac.uk or margaret.graham@unn.ac.uk

2. EVALUATION OF AVAILABLE CBIR SOFTWARE SYSTEMS

This phase of the work commenced in September 1999 and is being undertaken within the Manchester Visualization Centre, and is expected to be complete by early 2000. It will involve the identification, acquisition and installation of a number of available CBIR systems (over 35 have been identified so far), both commercial and academic research systems. Each CBIR package will be systematically evaluated for usability and functionality within a laboratory setting. An initial and detailed comparative report of the different systems will be produced and widely disseminated.

The researcher at the MVC is Colin Venters. He can be contacted by email at c.venters@mcc.ac.uk

3. TESTING THE APPLICABILITY OF CBIR IN A RANGE OF PRACTICAL APPLICATION ENVIRONMENTS

This work will be undertaken within both the Institute for Image Data Research and the Manchester Visualization Centre after the Software Evaluation stage and be ongoing throughout the rest of the project. We will assess the usefulness of the CBIR tools and the search criteria which they employ in at least three application fields. Areas being considered include pharmacology, microbiology and related disciplines; meteorology, geography and geology, art history; design and marketing, and journalism.

We will implement each demonstration application in turn at approximately six-monthly intervals. Using the findings from stage 2, we will implement the most appropriate CBIR software systems to handle the particular image types. We will assess the usefulness of the CBIR tools and their retrieval performance within the laboratory setting as well as through a series of user studies. User groups will be identified through our extensive range of contacts and their participation sought for these tests. We aim to identify what type of software tool works best when and for what type of content. The user evaluation studies will incorporate a number of methods in order to involve as many end-users as possible, including electronic questionnaires, interviews, focus groups and, if appropriate, observation and concurrent verbal protocols.

The researcher at IIDR is Gavin Bewick. He can be contacted by email at gavin.bewick@unn.ac.uk

4. RAISING AWARENESS IN THE USER AND DEVELOPER

COMMUNITIES

This work will be undertaken by both the Institute for Image Data Research and the Manchester Visualization Centre. The demonstration applications will be made available to the HE user community via the Web. This will allow users to try out the software systems for themselves. Where practicable, users may be able to use their own data.

Our web sites will, in addition, contain links to a number of informative pages dealing with, for example, an introduction to image data management; the principles of shape, colour, and texture retrieval; discussion of the limitations of CBIR techniques; and other aspects of image retrieval in practice, such as, keyword indexing, interface and query formulation, and relevance feedback. The web site will be developed in the MVC and mounted on the Manchester server. Day to day maintenance and monitoring of use will be the responsibility of MVC.

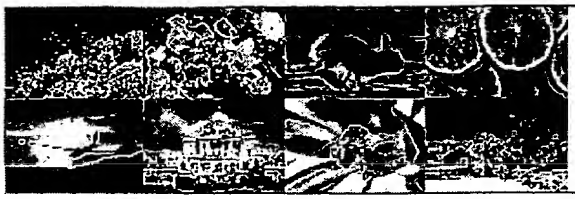
In addition, we aim to host a number of seminars, and courses and workshops in CBIR, bringing together users, other researchers, and application developers. We propose holding two seminars after the first year and two seminar sessions (with contributions from users involved in the evaluations) within the second year, to generally disseminate information about CBIR and the findings of the studies; and two workshops in the second year, of a more technical nature, with hands-on sessions. Further dissemination of the findings will be undertaken, as appropriate, through publications and attendance at conferences.

Throughout the duration of the project, we will offer advice and support to others within the UK academic community. These activities will be undertaken in close co-operation with the Technical Advisory Service for Images (TASI) and other relevant bodies.

Contact details for the CBIR Demonstrator Project:

Project Director: Dr. John Eakins, Institute for Image Data Reseach
Project Manager: Margaret Graham, Institute for Image Data Research
Project Manager: Dr Matt Cooper, Manchester Visualization Centre

[Home] [About the Institute] [People] [Research Programme] [Conferences] [Publications] [Guest Book] [Links]



Automatic Linguistic Indexing of Pictures

Wavelets, machine learning, data mining

- Developed by -

Penn State / Stanford University

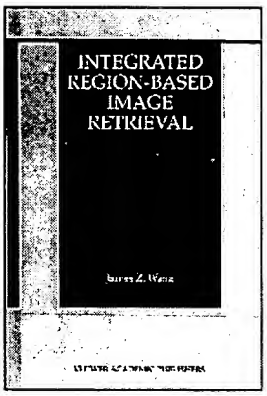
Content-based Image Retrieval Project

(1995-2000, Stanford University; 2001-, Penn State University)
(WWW-DB.Stanford.EDU/IMAGE , wang.ist.psu.edu/IMAGE)

>> This page holds information related to this project before August 2000.<<
>> For up-to-date info and demos related to this project, go to the new page http://wang.ist.psu.edu/IMAGE <<
>> You will be redirected in 30 seconds. <<

This content-based image search and automatic learning-based linguistic indexing project was started in 1995 when James Z. Wang developed an art image retrieval system for the Stanford University Libraries. He has later worked for the IBM QBIC project, the NEC AMORA project, and the AI Center of SRI International. From 1999 to 2000, the project was funded by the National Science Foundation under the TID (Trusted Image Distribution) project (PI: Gio Wiederhold). TID is part of the NSF Digital Library Initiative II (DLI-II) program. The technology research has been continued at Penn State University since 2001, with funding from the National Science Foundation ITR (PI: James Z. Wang), PNC Foundation, and SUN Microsystems. If you have any questions or comments about the image retrieval project, please send a message to James Z. Wang (jwang AT ist.psu. edu).

Main Project Group Members



Jia Li, Assistant Professor, Statistics, Penn State University (jiali AT db.stanford. edu)
James Z. Wang (corresponding member), PNC Tech. Career Dev. Professorship, School of IST, Penn State University (wangz AT cs. stanford. edu)
Gio Wiederhold, Professor (Emeritus), CS, Stanford University (gio AT cs . stanford . edu)

On-line Demos (DB size: 200,000 images)

For the latest info and demos, go to http://wang.ist.psu.edu/IMAGE

S I M P L I c i t y — Semantics-sensitive Integrated Matching for Picture LIbraries (1998-2000, region based, wavelets, statistical) GO!

wipe™ — Wavelet Image Pornography Elimination / Detection (1997-1998) (server down) GO!

Virtual Microscope — Progressive Zooming of Very Large Images using Wavelets (1998) GO!

WBIIS — Wavelet-based Image Indexing and Searching (old, 1996, server is down) GO!

Main Related Publications

1. James Z. Wang, Jia Li and Gio Wiederhold, ``SIMPLIcity: Semantics-Sensitive Integrated Matching for Picture Libraries,'' **IEEE Transactions on Pattern Analysis and Machine Intelligence**, vol. 23, no. 9, pp. 947-963, 2001. (download)

2. Jia Li and James Z. Wang, ``Automatic Linguistic Indexing of Pictures by a Statistical Modeling Approach,'' **IEEE Transactions on Pattern Analysis and Machine Intelligence**, vol. 25, no. 9, pp. 1075-1088, 2003. (download)

3. more.....

More Info (downloads, links)

Downloads, etc; Penn State project site.

Other or Previous Project Group Members

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M.S. Students at Stanford

Desmond Chan (deschan AT db. stanford. edu)
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Maintained by: **James Z. Wang**
7 8 5 6 9 Last Modified: February 7, 2004, James Z. Wang